

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A method of producing an immunoglobulin constant region, comprising:

transforming *E. Coli* with a recombinant expression vector including a nucleotide sequence encoding a signal sequence isolated from *E. Coli* and a nucleotide sequence encoding an immunoglobulin constant region, without a variable region;

culturing a resulting transformant; and

isolating ~~and purifying~~ the immunoglobulin constant region expressed by the transformant,

wherein the signal sequence is a heat-stable enterotoxin II signal sequence, and wherein the immunoglobulin constant region is expressed in the cytoplasm in a water soluble form and is not secreted into the medium.

2. (Previously presented) The method according to claim 1, wherein the immunoglobulin constant region is selected from the group consisting of constant regions from 1 IgG, IgA, IgM, IgE, and IgD.

3. (Previously presented) The method according to claim 2, wherein the IgG is selected from the group consisting of constant regions from IgG1, IgG2, IgG3, and IgG4.

4. (Original) The method according to claim 3, wherein the immunoglobulin constant region is an IgG4 constant region.
5. (Original) The method according to claim 4, wherein the immunoglobulin constant region is a human aglycosylated IgG4 constant region.
6. (Previously presented) The method according to claim 3, wherein the immunoglobulin constant region lacks all or a portion of a hinge region.
7. (Canceled)
8. (Previously presented) The method according to claim 1, wherein the recombinant expression vector comprises a nucleotide sequence encoding a heavy chain constant 1 region or a nucleotide sequence encoding a light chain constant region.
9. (Original) The method according to claim 1, wherein the immunoglobulin constant region has an amino acid sequence represented by SEQ ID NO. 21, 22, 23, 24, 25, 27, 29, 30, 34 or 35.
10. (Canceled)

11. (Previously Presented) The method according to claim 1, wherein the heat-stable enterotoxin II signal peptide has an amino acid sequence represented by SEQ ID NO. 36, 37, 38, 39, 40, 41, 42, 43, 44, 45 or 46.

12. (currently amended): The method according to claim 1, wherein the recombinant expression vector comprises the signal sequence, and a nucleotide sequence encoding an immunoglobulin constant region ~~as set forth according to~~ of SEQ ID NOs: 21-25, 27, 29, 30, 34, or 35.

13. (Previously presented) The method according to claim 1, wherein the transformant is selected from the group consisting of *E. Coli* BL21/pSTIIGICH1 3(HM10935; Deposit No. KCCM-10600), BL21/pSTIIdCG1Fc (HM10927; Deposit No. KCCM-10588), BL21/pSTIIdCG1SFC (HM10928; Deposit No. KCCM-10589), BL21/pSTIIdCG1SFFc (HM10929; Deposit No. KCCM-10594), BL21/pSTIIG1Mo (HM10930; Deposit No. KCCM10595), BL21/pSTIIdCG4Fc (HM10932; Deposit No. KCCM-10597), 1 BL21/pSTIIG4CH1 3 (HM10931; Deposit No. KCCM-10596), BL21/pSTIIG4Mo (HM10933; Deposit No. KCCM-10598), and BL21/pSTIIG4H K (HM10934; Deposit No. KCCM-10599).

14. (Canceled)

15. (Withdrawn) An immunoglobulin constant region prepared by the method of claim 1.

16. (Previously presented) The method according to claim 1, wherein the immunoglobulin constant region lacks all or a portion of a hinge region.